

Prostate cancer cases in the Cape Fear region, in 2013.

Prostate cancer is the most frequently diagnosed cancer in men, besides the skin cancer. The incidence rate is about 60% higher in African-Americans compared to Non-Hispanic whites. There were an estimated 29,500 deaths in 2013, from prostate cancer, being the second leading cause of cancer death in men. Prostate cancer death rate has decreased since the early 1990s in men of all races and ethnicities. However, they remain more than twice as high in African-Americans compared to any other group of men.

For the year 2013, there were 7580 cases reported in the state of North Carolina. There were 95 new cases of prostate cancer diagnosed in the Cape fear region. There were 57 White (60%), 36 Black (38%), and 2 (2%) unknown ethnicities. There were 40 (42%) cases, in the age group of 60-69, 25 (26%) cases in the age group of 70-79, 22 (23%) cases in the age group of 50-59, 6 (6%) cases in the age group of 50-89, and 2 (2%) cases in the group of 40-49.

85 of these cases were in Cumberland County, 4 were in Robeson County, 3 in Hoke County, and 3 in other areas.

58% cases were diagnosed in stage II, followed by 15% stage I, 13% stage III, and 9% stage IV.

Stage by race showed that among whites 11 were stage I, 33 stage II, 9 stage III, and 4 stage IV. Among the Blacks, 4 were stage I, 23 stage II, 4 stage III, and 5 stage IV.

When we compare the first course treatment data of prostate cancer diagnosed in 2013 at Cape Fear Valley health system, versus all Hospitals in all states; 40% received radiation and hormone therapy, compared to 12% at other institutions. At Cape fear Valley, 27% underwent surgery only, compared to 49% at other institutions. Radiation only was offered to 12% at Cape fear Valley, compared to 15% at other institution. The combination of surgery, radiation and hormone therapy was 4% at Cape fear Valley, compared to 1% at other institutions. Single agent hormone therapy was 4% at Cape fear Valley, compared to 5% at other institutions. Active surveillance was observed in 3% cases at care fear Valley, compared to 6% at other institutions. The numbers for surgery and radiation, surgery and hormone therapy, chemotherapy and hormone therapy were identical at care fear Valley, compared to other institutions.

The stage of prostate cancer diagnosed in 2013 at Cape Fear Valley health system, compared to other institutions; 19% stage I cases compared to 21%, 62% stage II, compared to 56%, 10% stage III compared to 12%, 9% for stage IV in both the groups.

Our data is comparable to the NCDB data by the American College of surgeons. The AJCC stage at diagnosis, age groups, and treatment according to the NCCN guidelines were similar to the national data.

According to the treatment guidelines, early stage prostate cancer may be treated with surgery, which includes open, laparoscopic, or robotic assisted prostatectomy; external

beam radiation, or radioactive seed implants known as brachytherapy. Data shows similar survival rates for patients with early stage disease treated with any of these methods. And there is no current evidence supporting a best treatment for prostate cancer in this stage. Hormonal therapy may be used along with surgery, or radiation therapy in some cases, especially in high Gleason score prostate cancer. Active surveillance rather than immediate treatment, can be an appropriate option for men with less aggressive tumors, and for older men with comorbidities.

More advanced prostate cancer is treated with hormonal therapy, radiation therapy, and chemotherapy if they become castrate resistant.

The majority of prostate cancer cases in stage I and stage II have a 5 year relative survival rate of approaching 100% with appropriate treatments and meticulous follow-up's.